

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Shipman, Robert  
Leushner, James  
Dunn, James M.
- (ii) TITLE OF INVENTION: METHOD AND REAGENTS FOR TESTING FOR  
MUTATIONS IN THE BRCA1 GENE
- (iii) NUMBER OF SEQUENCES: 77
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Oppedahl & Larson
  - (B) STREET: 1992 Commerce Street Suite 309
  - (C) CITY: Yorktown
  - (D) STATE: NY
  - (E) COUNTRY: US
  - (F) ZIP: 10598
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
  - (B) COMPUTER: IBM compatible
  - (C) OPERATING SYSTEM: MS DOS
  - (D) SOFTWARE: Word Perfect
- (vi) CURRENT APPLICATION DATA :
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
- (viii) ATTORNEY/AGENT INFORMATION :
  - (A) NAME: Larson, Marina T.
  - (B) REGISTRATION NUMBER: 32,038
  - (C) REFERENCE/DOCKET NUMBER: VGEN.P-028-US
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: (914) 245-3252
  - (B) TELEFAX: (914) 962-4330
  - (C) TELEX:

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: human
- (ix) FEATURE:

T0923T "4262E00T

- (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GGTAGCCCCCT TGGTTTCCGT G 21

- (2) INFORMATION FOR SEQ ID NO: 2:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: yes  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

ACGCCAGTAC CCCAGAGCAT C

- (2) INFORMATION FOR SEQ ID NO: 3:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: no  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

AATGATGAAA ATGAAGTTGT C 21

- (2) INFORMATION FOR SEQ ID NO: 4:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: yes

- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GTTCATTTGC ATAGGAGATA A 21

- (2) INFORMATION FOR SEQ ID NO: 5:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAGCCTCATT TATTTTCTTT T 21

- (2) INFORMATION FOR SEQ ID NO: 6:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

TGAAGGACAA AAACAAAAGC T 21

- (2) INFORMATION FOR SEQ ID NO: 7:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: no  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

ACCTTAAATT TTTCAACAGC T 21

(2) INFORMATION FOR SEQ ID NO: 8:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: yes  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

CTCTACAGAA AACACAAAAT T 21

(2) INFORMATION FOR SEQ ID NO: 9:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: no  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GCCTTTTGAG TATTCTTTCT A 21

(2) INFORMATION FOR SEQ ID NO: 10:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: human
- (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

TTCTACTTTT CCTACTGTGG T 21

- (2) INFORMATION FOR SEQ ID NO: 11:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

AGGTTTCTA CTGTTGCTGC A 21

- (2) INFORMATION FOR SEQ ID NO: 12:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

CAGCACTTCA CTCTCATTCT T 21

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

CATACATTTT TCTCTAACTG C 21

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GAAGAAGAAG AAAACAAATG G 21

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

AGGAGGAAAA GCACAGAACT G 21

- (2) INFORMATION FOR SEQ ID NO:16:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
    - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

TACTTAAAAA ACCTGAGACC C 21

- (2) INFORMATION FOR SEQ ID NO: 17:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
    - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

CAAGTACATT TTTTAAACCC T 21

- (2) INFORMATION FOR SEQ ID NO:18:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL:no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

AAAGAGAGAA ACATCAATCC T 21

(2) INFORMATION FOR SEQ ID NO: 19:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL:no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

TTTGACAGTT CTGCATACAT G 21

(2) INFORMATION FOR SEQ ID NO: 20:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL:no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

CAAATGGTCT TCAGAATAAT C 21

(2) INFORMATION FOR SEQ ID NO: 21:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21



(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

CTCCAAGGTG TATGAAGTAT G 21

(2) INFORMATION FOR SEQ ID NO: 22:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

CAGCCTTTTC TACATTCATT C 21

(2) INFORMATION FOR SEQ ID NO:23:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

ATTACAGCAT GAGAACAGCA G 21

- (2) INFORMATION FOR SEQ ID NO: 24:
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

GAGTCATCAG AACCTAACAG T 21

- (2) INFORMATION FOR SEQ ID NO: 25:
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

ATAGCAGCAT TCAGAAAGTT A 21

- (2) INFORMATION FOR SEQ ID NO: 26:
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human

- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

TCAGTAACAA ATGCTCCTAT A 21

- (2) INFORMATION FOR SEQ ID NO:27:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

CTCCCCAACT TAAGCCATGT A 21

- (2) INFORMATION FOR SEQ ID NO:28:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

TCGAGTGATT CTATTGGGTT A 21

- (2) INFORMATION FOR SEQ ID NO:29:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL:no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

TGGTCATGAG AATAAAACAA A 21

(2) INFORMATION FOR SEQ ID NO: 30:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL:no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

TGGCATTGG TTGTACTTTT T 21

(2) INFORMATION FOR SEQ ID NO: 31:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL:no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

AAGCCACCT AATTGTACTG A 21

(2) INFORMATION FOR SEQ ID NO: 32:  
 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

TTTGGGGTCT TCAGCATTAT T 21

(2) INFORMATION FOR SEQ ID NO: 33:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

AAGAAGAGAA ACTAGAAACA G 21

(2) INFORMATION FOR SEQ ID NO: 34:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

AATGGATACT TAAAGCCTTC T 21

- (2) INFORMATION FOR SEQ ID NO: 35:
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

AAGGGACTAA TTCATGGTTG T 21

- (2) INFORMATION FOR SEQ ID NO: 36:
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GTCTGTACAG GCTTGATATT A 21

- (2) INFORMATION FOR SEQ ID NO: 37:
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

TGAATGTGAA CAAAAGGAAG A 21

(2) INFORMATION FOR SEQ ID NO: 38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

ATGGGAAAAA GTGGTGGTAT A 21

(2) INFORMATION FOR SEQ ID NO: 39:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

AACGAAACTG GACTCATTAC T 21

(2) INFORMATION FOR SEQ ID NO: 40:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

TGTTTCTACC TAGTTCTGCT T 21

- (2) INFORMATION FOR SEQ ID NO: 41:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

TGGGCTCCAG TATTAATGAA A 21

- (2) INFORMATION FOR SEQ ID NO: 42:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

TCAGCAAAAC TAGTATCTTC C 21

- (2) INFORMATION FOR SEQ ID NO: 43:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

T0922T-4262E004



(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: no  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

CATGCATCTC AGGTTTGTTT T 21

(2) INFORMATION FOR SEQ ID NO: 44:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: yes  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

TATGCCTAGT AGACTGAGAA G 21

(2) INFORMATION FOR SEQ ID NO: 45:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: other nucleic acid  
(iii) HYPOTHETICAL: no  
(iv) ANTI-SENSE: no  
(v) FRAGMENT TYPE: internal  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: human  
(ix) FEATURE:  
(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

GCTTCCCTGC TTCCAACACT T 21

(2) INFORMATION FOR SEQ ID NO: 46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

TGCCTCATTT GTTTGAAGA A 21

(2) INFORMATION FOR SEQ ID NO: 47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

ACAGTGCAGT GAATTGAAG A 21

(2) INFORMATION FOR SEQ ID NO: 48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

CTCCCCAAAA GCATAACAT T 21

(2) INFORMATION FOR SEQ ID NO: 49:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GCGTTTATAG TCTGCTTTTA C 21

(2) INFORMATION FOR SEQ ID NO: 50:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

TTGGAGTGGT ATTCTTTTAA G 21

(2) INFORMATION FOR SEQ ID NO: 51:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

TATTTTCAATTT TCTTGGTACC A 21

(2) INFORMATION FOR SEQ ID NO: 52:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

ATAAAGGGGA AGGAAAGAAT T 21

(2) INFORMATION FOR SEQ ID NO: 53:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GAATTATCAC TATCAGAACA A 21

(2) INFORMATION FOR SEQ ID NO: 54:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

CAATCAGAGT TCAATATAAA T 21

(2) INFORMATION FOR SEQ ID NO: 55:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: no  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

CCAGCAAGTA TGAAATGTCC T 21

(2) INFORMATION FOR SEQ ID NO: 56:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (ii) MOLECULE TYPE: other nucleic acid  
 (iii) HYPOTHETICAL: no  
 (iv) ANTI-SENSE: yes  
 (v) FRAGMENT TYPE: internal  
 (vi) ORIGINAL SOURCE:  
 (A) ORGANISM: human  
 (ix) FEATURE:  
 (D) OTHER INFORMATION: amplification primer for BRCA1 gene  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

CTTTATGTAG GATTCAGAGT A 21

(2) INFORMATION FOR SEQ ID NO: 57:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: human
- (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

CTTAACAGAG ACCAGAACTT T 21

(2) INFORMATION FOR SEQ ID NO: 58:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: human
- (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

TTTCCAGAAT GTTGTTAAGT C 21

(2) INFORMATION FOR SEQ ID NO: 59:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: human
- (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

CTAGTATTCT GAGCTGTGTG C 21

(2) INFORMATION FOR SEQ ID NO: 60:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

CCTCGCCTCA TGTGGTTTTA T 21

(2) INFORMATION FOR SEQ ID NO: 61:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

CTCTTTAGCT TCTTAGGACA G 21

(2) INFORMATION FOR SEQ ID NO: 62:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

100394-126001

- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

CTCAAGACTC AAGCATCAGC A 21

- (2) INFORMATION FOR SEQ ID NO: 63:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

TGTGAATCGC TGACCTCTCT A 21

- (2) INFORMATION FOR SEQ ID NO: 64:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

AAGTGGTGCA TTGATGGAAG G 21

- (2) INFORMATION FOR SEQ ID NO: 65:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

TCTCTTATCC TGATGGGTGT G 21

- (2) INFORMATION FOR SEQ ID NO:66:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

ATACAGAGTG GTGGGGTGAG A 21

- (2) INFORMATION FOR SEQ ID NO: 67:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: no
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

CAGTGGTGCG ATCTCAGCTC A 21

- (2) INFORMATION FOR SEQ ID NO: 68:
- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

AAGGCTGGTG CTGGAAGTCT G 21

- (2) INFORMATION FOR SEQ ID NO: 69:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
    - (ii) MOLECULE TYPE: other nucleic acid
    - (iii) HYPOTHETICAL: no
    - (iv) ANTI-SENSE: no
    - (v) FRAGMENT TYPE: internal
    - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
    - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

TAGAGGGCCT GGGTTAAGTA T 21

- (2) INFORMATION FOR SEQ ID NO: 70:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
    - (ii) MOLECULE TYPE: other nucleic acid
    - (iii) HYPOTHETICAL: no
    - (iv) ANTI-SENSE: yes
    - (v) FRAGMENT TYPE: internal
    - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
    - (ix) FEATURE:
    - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAGAAGACTT CTGACGCTAC C 21

(2) INFORMATION FOR SEQ ID NO: 71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

CCTACTTTGA CACTTTGAAT G 21

(2) INFORMATION FOR SEQ ID NO: 72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: yes

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

(ix) FEATURE:

(D) OTHER INFORMATION: amplification primer for BRCA1 gene

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

AATGTGCCAA GAACTGTGCT A 21

(2) INFORMATION FOR SEQ ID NO: 73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(v) FRAGMENT TYPE: internal

(vi) ORIGINAL SOURCE:

(A) ORGANISM: human

- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

TAATCTCTGC TTGTGTTCTC T 21

- (2) INFORMATION FOR SEQ ID NO: 74:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: yes
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

GTAGCCAGGA CAGTAGAAGG A 21

- (2) INFORMATION FOR SEQ ID NO: 75:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no
  - (iv) ANTI-SENSE: no
  - (v) FRAGMENT TYPE: internal
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: human
  - (ix) FEATURE:
  - (D) OTHER INFORMATION: amplification primer for BRCA1 gene
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

AAACCTTCCA AATCTTCAAA T 21

- (2) INFORMATION FOR SEQ ID NO: 76:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: other nucleic acid
  - (iii) HYPOTHETICAL: no

- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

TTCTGTTTCAT TTGCATAGGA G 21

(2) INFORMATION FOR SEQ ID NO: 77:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
- (iii) HYPOTHETICAL: no
- (iv) ANTI-SENSE: yes
- (v) FRAGMENT TYPE: internal
- (vi) ORIGINAL SOURCE:
- (A) ORGANISM: human
- (ix) FEATURE:
- (D) OTHER INFORMATION: amplification primer for BRCA1 gene
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

TGTAAGGTCA ATTCTGTTCA T 21

TTCTGTTTCAT TTGCATAGGA G 21